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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,580	07/22/2004	CHIEH-SHENG HSU	WNCP0011USA	4579
27765	7590	10/13/2005	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			VY, HUNG T	
			ART UNIT	PAPER NUMBER
			2821	
DATE MAILED: 10/13/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/710,580

Applicant(s)

HSU ET AL.

Examiner

Hung T. Vy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This is response to Applicant's amendment filed 09/02/2005. In virtue of this amendment, claims 1-20 remain pending in this application. Upon reconsideration, the previous office action mailed on 08/02/2005 is hereby withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Guiles et al.

### **Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-4, 9, 13-14 and 17 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Guiles et al., U.S. patent No. 6,703,114.

Regarding claims 1, 9 and 17, Guiles et al. discloses a patch antenna and a method of antenna assembly, comprising: a polymer plastic dielectric layer face 3 (See column 5, line 27 or column 4, line 50) having a top surface and a bottom surface, a first priming layer 2 on the top surface, a second priming layer 4 on the bottom surface, a first adhesive layer 6 on the first priming layer 2, a second adhesive layer 6 on the second priming layer 4, a radiating element 1 (See column 3, line 30-55, column 7, line 65-68 and column 8, line 1-10) on the first adhesive layer 2, and a ground plate 5 on the second adhesive layer 6 (See fig. 2).

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Regarding claims 3, 13, and 19, Guiles et al. discloses the dielectric layer comprises a material selected from a group consisting of Polystyrenes (see column 4, line 27).

Regarding claims 4, and 14, Guiles et al. discloses the dielectric layer substantially is polymer plastic (See column 5, line 27), the first priming layer comprises a polymeric surfactant.

### **Claim Rejections - 35 U.S.C. § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 10 and 18 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Guiles et al., U.S. patent No. 6,703,114 in view of O'Neill, Jr., U.S. Patent No. 5,969,681.

Regarding claims 2, 10 and 18, Guiles et al. discloses all limitation of the patch antenna recited in claimed 1 but Guiles et al. does not disclose a low noise amplifier integrated with the patch antenna by sharing a common ground plate or by electrically connecting respective ground plates and a signal connector pin from the amplifier to the radiating element. However, O'Neill, Jr. discloses the LNA (See column 12, line 64-68). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Guiles et al. to arranging LNA by sharing a common ground plate in order to reduce thickness and stray inductances since such

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arrangement of LNA for the stated purpose has been well known in the art as evidenced by the teaching of O'Neill, Jr. (See column 12, line 66-67).

5. Claims 5-8, 10-12, 15-16 and 19-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Guiles et al., U.S. patent No. 6,703,114 in view of Tillery et al., U.S. Pub. No. 2004/0150561.

Regarding claims 5-8, 10-12, 15-16, and 19-20, Guiles et al. disclose all limitations of invention recited in claim 1 except for the dielectric layer substantially is polymer plastic. However, Tillery et al. disclose the dielectric layer substantially is polymer plastic (See paragraph 0007). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Guiles et al. to have different material as taught by Tillery et al. The motivation for doing so would have been to provide different material of dielectric in order to reduce cost. Further more, the dielectric has different material since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

### **Conclusion**

6. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hung T. Vy  
Art Unit 2821  
October 5, 2005.



**TUYET VO**  
**PRIMARY EXAMINER**